

***The Institution of Engineers, Australia: Sydney Division
Monaro Group***

Oral History Program: Biographical Notes

**Noel Bruce Carter (1928-)
Mechanical Engineer**

- Birth & Family:** Noel Bruce Carter was born on the 27th January 1928 in Te Aroha, in the Waikato district of New Zealand. Noel's most memorable experience was a joy flight in the 'Southern Cross' with Charles Kingsford Smith when he was six.
- Carter married his first wife, Dulcie, in Cooma and had four children. After his children were grown he and his wife separated and he later remarried; his second wife's name was Caroline.
- Education:** Ngania Primary School.
Matamata College (Dux of the School and Head Prefect, 1945).
- Qualifications:** BE (Mech) (Hons). Sutherland University College of New Zealand, 1951 (majoring in Aeronautical engineering)
Post Graduate Certificate in Nuclear Technology, Australian School of Nuclear Technology, 1969.
- Memberships:** Institution of Engineers, Australia.
- Work History:** Carter joined SMHEA in May 1951 at the invitation of Professor T.D.J. Leech, the former Dean of Engineering at Auckland who had been recruited as Chief Engineer, Scientific Services Division. Noel travelled to Sutherland and on to Sydney by aeroplane and then by boat. Initially he worked in Sydney in the Fluid Mechanics Branch of Scientific Services on the design of the laboratory and the instrumentation workshop. The workshop was established in Sydney and later moved to Cooma.
- He spent three months at Tumut Pond dam site measuring water leakage and the depth of fractured rocks in boreholes in the dam foundations, before moving to Cooma in late 1952. Some of the projects he was involved in during his time in Cooma were the design of current-meter calibration equipment for the hydraulics laboratory and the design and installation of a refrigeration plant at Spencers Creek dam site, with the object of possibly permanently freezing the dam foundation rather than excavating into sound rock. This dam was not built, for environmental reasons.
- In 1954 Carter went to the United States on a graduate-in-service training scheme with the United States Bureau of Reclamation. His work, initially in the hydraulics laboratory in Denver and afterwards with the mechanical engineering machinery group, included field tests of pumps and turbines, turbine installation and maintenance and operation of plant in hydro-electric power stations.
- In 1957 he transferred from the Scientific Services Division to the Mechanical Engineering Division, Power Plant Branch. (*Better located in the repaeat two paras down*). He worked on the design and commissioning of mechanical plant installations in all of the Snowy

power stations except for Guthega. This work involved the layout of the plant in the station, the preparation of technical specifications for the plant, contract supervision, supervision of the factory, inspection and testing and finally the commissioning of the plant.

While major civil works were carried out by contract, the installation of electrical and mechanical plant was carried out by the Authority's own technical staff.

In 1974 Carter transferred to the Snowy Mountains Engineering Corporation and continued doing similar work on hydro power stations overseas. He spent two and a half years as Manager of the SMEC office in Malaysia from 1984 to 1987.

Noel retired in 1989 but continued doing some consulting work afterwards, applying his Snowy experience to projects in Australia, New Zealand, Nepal, Laos, Cambodia, Malaysia and China. When interviewed in March 1999, he was still working one or two days a week.

Prepared by Patricia Taaffe, July 2003, from an oral history interview with Noel Carter conducted by Matthew Higgins on 03.03.99.